

REMARKS

Claims 1-10, 12-13, 15-17 and 19-49 are currently pending in the subject application and are presently under consideration. Applicants' representative thanks the Examiner for courtesies extended during the teleconference on June 16, 2009 – wherein novel aspects of the subject innovation were noted. Claims 1-6, 8-10, 13, 15, 20, 21-23, 27, 29, 30-33, 39, 40, 44, 47, 48 have been amended and claims 36, 37, 38 have been cancelled.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objections to Claims 1, 5, 6, 8, 9, 10, 15, 22, 40, and 44

The subject claims have been objected to because of various informalities, typos, and writing styles. Applicants' representative has amended such claims to comply with the Examiner's requests, and withdrawal of such objection is respectfully requested.

II. Rejection of Claims 1-9, 15, 20, 21, 22, 24-36, 38, 39 and 44-49 Under 35 U.S.C §112

Claims 1-9, 15, 20, 21, 22, 24-36, 38, 39 and 44-49 stand rejected under 35 U.S.C §112, second paragraph, as being indefinite for absence of antecedent basis. Applicants' representative has amended such claims to clarify subject matter applicants regard as the invention, and to further correct the absence of antecedent basis as stated in the Office Action.

III. Rejection of Claims 1, 3-9, 33-35, 38 and 44-49 Under 35 U.S.C. §101

Claims 1, 3-9, 33-35, 38 and 44-49 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Applicants' representative has amended such claims to recite a processor/memory that satisfy requirements of 35 U.S.C. §101. Withdrawal of this rejection is respectfully requested.

IV. Non-Statutory Double Patenting Rejection of Claims 1, 10, 33, 39, 44, and 47

Various claims of the subject application have been rejected on grounds of non statutory obviousness type double patenting over US Patent 6,847,854; US Patent 7,050,873; and US patent 7,143,016.

The Office action states that a timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) or 1.321 (d) can overcome this rejection. Applicants' representative herein submits such terminal disclaimer, and withdrawal of this rejection is respectfully requested.

V. Rejection of Claims 1, 2, 4-6, 8-9, 36, 39, 44,45 and 47-49 Under 35 U.S.C. §103(a)

Claims 1, 2, 4-6, 8-9, 36, 39, 44,45 and 47-49 stand rejected under 35 U.S.C. §103(a) as being obvious over Reid *et al.* U.S. Patent No. 6,298,308 (hereinafter Reid) in view of Hays *et al.* U.S. Patent No. 6,330,525 (hereinafter Hays). Withdrawal of this rejection is respectfully requested. The proposed modification does not teach or suggest all the claimed limitations.

The subject innovation in part relates to employing machine diagnostic and/or prognostic information in connection with optimizing ***an overall*** business operation based on ***correlated efficiencies*** among system components. Such is in contrast to performing conventional evaluation of systems at an isolated or level of granularity, wherein ***higher-level aspects*** of a business or industrial concern related to the system operation ***as a whole***, are overlooked. In one aspect, an optimization component can correlate efficiency information related to the components of the system - (along with such efficiency information related to components of a larger process or system of which the system is a part thereof) - to select the desired operating point for optimization of ***overall system efficiency***. Such aspects of the subject innovation are not disclosed by Reid in view of Hays.

Reid is directed to a network of local experts that analyze received vibrations from a machine, and supply diagnostic information. As such, a condition monitoring is set by local experts to evaluate machine vibrations and associated performances. Reid does not disclose determining correlated efficiencies among system components to optimize ***an overall*** business operation. Moreover, the secondary reference of Hays does not make up for the aforementioned deficiencies of Reid.

Hays relates to diagnosing rotating equipment commonly used in the factory and process control. Such diagnosis is based on the comparison of the current pump signature curves resulting from the acquisition of process variables from sensors monitoring the current condition of the pump and the original or previous pump performance curve from ***prior*** monitoring or knowledge of the pump geometry, installation effects and properties of the pumped process liquid. The diagnostic apparatus and method can be applied to any rotating machine. Such is not

determining correlation efficiencies among various components of the system to optimize for *overall system efficiency*, as in applicants' claimed invention.

Independent claim 1 recites "a correlation engine that analyzes data to correlate operation among the plurality of machines *for a global optimization* of the industrial business *operation as a whole*". Likewise independent claim 10 recites "*correlating at least two of motor efficiency information, pump efficiency information, and motor drive efficiency information to derive correlated system efficiency information and optimize the entire industrial automation system as a whole*", and independent claim 33 recites "means *for correlating at least two of motor efficiency information, pump efficiency information, and motor drive efficiency information in order to derive correlated system efficiency information for optimizing an entire operation of the industrial automation system*". Similarly, independent claim 39 recites "controlling at least one component according to the desired operating point *for a global optimization of the plurality of machines as a whole*", and independent claim 40 recites for a performance optimization of the industrial automation system *as a whole*. Likewise, independent claim 44 recites "a performance optimization of the industrial automation *system as a whole*", and independent claim 47 recites "a global optimization of the industrial business *operation as a whole*".

In view of the at least above comments, it is readily apparent that Reid in view of Hays does not disclose the subject invention as recited in the independent claims (and claims respectively dependent therefrom.) Thus, this rejection should be withdrawn.

VI. Rejection of Claims 3 and 7 Under 35 U.S.C. §103(a)

Claims 3 and 7 stand rejected under 35 U.S.C. §103(a) as being obvious over Reid in view of Hays, and further in view of Roemer *et al.* "Advanced Diagnostics and Prognostics for Gas turbine Engine Risk Assessment", IEEE 2000 (hereinafter Roemer). Claim 3 and claim 7 depend from independent claim 1, and Roemer does not make up for the aforementioned deficiencies of Reid in view of Hays with respect to independent claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

VII. Rejection of Claim 46 Under 35 U.S.C. §103(a)

Claim 46 is rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Hays and in view of Burris *et al.* U.S. Publication 200310208394 (hereinafter Burris). Claim 46 depends from independent claim 44 and Burris *et al.* does not make up for the aforementioned deficiencies of Reid in view of Hays with respect to independent claim 44. Accordingly, withdrawal of this rejection is respectfully requested.

VIII. Rejection of Claims 10, 13, 15-17, 19-22, 24-29, 32-35 and 37 Under 35 U.S.C. §103(a)

Claims 10, 13, 15-17, 19-22, 24-29, 32-35 and 37 are rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Hays, and further in view of Soneda *et al.*, US Patent No. 6,619,111 (hereinafter Soneda). Claims 13, 15-17, 19-22, 24-29, 32 depend from independent claim 10, and claims 34-35 depend from independent claim 33. Soneda does not does not make up for the aforementioned deficiencies of Reid in view of Hays with respect to the subject independent claims. Accordingly, withdrawal of this rejection is respectfully requested.

IX. Rejection of Claims 12 and 23 Under 35 U.S.C. §103(a)

Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Soneda, and further in view of Hays and in view of Eryurek *et al.*, US Patent No. 6,795,798 (hereinafter Eryurek). Claims 12, 23 depend from independent claim 10 and Eryurek does not make up for the aforementioned deficiencies of Reid in view of Hays with respect to independent claim 10. Accordingly, withdrawal of this rejection is respectfully requested.

X. Rejection of Claims 30, 31 Under 35 U.S.C. §103(a)

Claims 30, 31 are rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Soneda and in view of Hays and in view of Admitted Prior Art (hereinafter APA). Claims 30, 31 depend from independent claim 10 and Soneda in view of the APA does not make up for the aforementioned deficiencies of Reid in view of Hays with respect to independent claim 10. Accordingly, withdrawal of this rejection is respectfully requested.

XI. Rejection of Claim 38 Under 35 U.S.C. §103(a)

Claim 38 is rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Hays in view of Kimoto *et al.* U.S. Patent No. 5,034,945 (hereinafter Kimoto) and further in view of Roemer. Claim 38 has been cancelled and withdrawal of this rejection is respectfully requested.

XII. Rejection of Claim 40, 41-43 Under 35 U.S.C. §103(a)

Claims 40, 41-43 are rejected under 35 U.S.C. 103(a) as being obvious over Reid in view of Hays and in view of Eryurek and further in view of Soneda. Claims 41-43 depend from independent claim 40 and Eryurek in view of Soneda fails to make up for the aforementioned deficiencies of Reid in view of Hays with respect to independent claim 40. Withdrawal of this rejection is respectfully requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP246USC].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,
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